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A MILITIA FOR THE SEA.

WASHINGTON, in his message to the Third Congress, said : "There is a rank due to the United States among nations which will be withheld, if not absolutely lost, by the reputation of weakness. If we desire to avoid insult we must be able to repel it ; if we desire to secure peace—one of the most powerful instruments of our prosperity—it must be known at all times that we are ready for war."

Madison said : "If America should have vessels at all, she should have enough for all the purposes intended ; to do her own carrying, to form a school for seamen, laying the foundation of a navy, and to be able to support herself against the interference of foreigners."

Jefferson, in his famous Report on Commerce, said : "Our navigation involves still higher considerations. As a branch of industry, it is valuable ; but as a resource of defense essential. The position and circumstances of the United States leave them nothing to fear from their land-board, and nothing to desire beyond their present rights. But on the sea-board they are open to injury, and they have there, too, a commerce which must be protected. This can only be done by possessing a respectable body of citizen seamen, and of artisans and establishments in readiness for ship-building. If particular nations grasp at undue shares (of commerce or carrying), and more especially if they seize on the means of the United States to convert them into aliment for their own strength and withdraw them entirely from the support of those to whom they belong, defensive and protecting measures become necessary on the part of the nation whose marine resources are thus invaded, or it will be disarmed of its defense, its productions will be at the mercy of the nation which has possessed itself exclusively of the means of carrying them, and its politics may be influenced by those who command

its commerce. The carriage of our own commodities, if once established in another channel, cannot be resumed in the moment we desire. If we lose the seamen and artisans whom it now occupies, we lose the present means of marine defense, and time will be requisite to raise up others, when disgrace or losses shall bring home to our feelings the evils of having abandoned them."

These are not the words of ship-builders or ship-owners, but of three of the wisest and most far-sighted of our earlier statesmen. No one will question their patriotism, nor that they were seeking the best good of their country. The patriotic policy which they laid down was sustained both in our merchant marine and navy until the introduction of steam into the world's navies. Before that time, when all were alike dependent on wind and sail, no nation excelled ours in skillful and daring enterprise on the sea. It is since that introduction, and more especially since our civil war, that we have lost position, both in our naval power and merchant marine. Our Government appears to have had no settled policy with regard to either great interest, while foreign nations have paid close and increasing attention to both. As for the navy, a make-shift system has been followed. Whenever anything has been done, it has been under the stress of emergency, when all was confusion and alarm, and when an attempt was made to break up the Government, and the work of a year must be crowded into three months. The cry, "We must do the best we can in the crisis," has often been heard by our people; and when the crisis was over,—some sort of means to weather it having been patched up at enormous expense,—the same listless, indifferent policy has been again pursued. This course has cost the country many times more millions of dollars than were needed, if properly expended, to have made and maintained for us the most powerful navy and most profitable marine afloat. Yet, when all was done, what was there to show for it? This course has brought us to a condition of which Jefferson's words were only too prophetic. Particular nations have grasped at undue shares of our ocean-carrying; through neglect of protecting measures, we have been disarmed of defense; our products are at the mercy of foreign nations, and our politics have long felt the evils of foreign influence. It is time this was changed.

I propose to show our present naval condition, the costly consequences of naval weakness in the past, the urgent necessity to

provide naval protection for the future, and to suggest a plan to provide this protection in the most economical and effective way,—a way at once profitable to the Government and promotive of our commerce.

The United States has thirteen thousand five hundred miles of coast—fronting on two oceans and indented by a thousand harbors—to protect. Claiming like protection, also, are a coast marine and trade nearly, if not quite, equal to the entire foreign trade of the country, subject to be cut to pieces or broken up at any moment by a foreign power. I do not need to argue that first duty of government to provide for the proper protection of its people and property against attack on land or sea. As Secretary of the Navy Toucey said, in his report for 1860:

“That we must have a navy for protection and defense; that we must have the means of continuing it in existence, and of employing it; that the duty of providing both has been devolved on the Federal Government, are self-evident propositions. To be able at any time, at short notice, to throw a powerful naval force upon any given point where our interests are threatened, or the lives of American citizens are in jeopardy, is not only a constitutional duty, but one of the safest, most beneficent, and salutary powers that can be intrusted to official hands under a republican form of government. A policy of naval strength is essential to the protection of our coasts and commerce, and of American citizens and their property on the ocean and in distant countries; to the preservation of peace, the efficiency of negotiation, the general advancement of our commercial interests, the maintenance of our appropriate position among nations, and the prompt vindication of our rights and of the honor of the country.”

What protection has the United States provided for its coast and coasting trade?

Again, our surplus products sent by ship to foreign markets amounted in 1870 to about 2,500,000 tons; in 1880 to over 15,000,000 tons, valued at \$1,589,472,093; and in 1890, at anything like a proportionate increase, will be upward of 50,000,000 tons. We have for many years been paying from \$70,000,000 to \$100,000,000 a year in freight money to foreign carriers, are now paying \$140,000,000, and this amount must increase proportionately with our exports. Our products are carried almost entirely in foreign bottoms, and are therefore liable at any time to be endangered by foreign complications. Suppose the three nations which are doing the principal part of our carrying—England, France, and Germany—should become involved in war. The first thing would be to attack each other's ships, and in destroy-

ing those ships destroy our products. We might then have the unpleasant experience of seeing the privateers of hostile nations lying in wait off Sandy Hook, to prey upon any ship that ventured to put out to sea loaded with our cargoes. What means have we to guard this great interest? What redress could national law give us in such a case? What could we do to secure the carrying of our products, having no ships of our own, nor the skilled labor to produce them, and being unable to buy them of England in such emergency? What danger should we then be in, through pursuing a policy of dependence upon foreign carriers and ship-builders? Would we for a moment allow our railroad system of transportation to be subject to such risks and chances? Yet is not the steam-ship line simply the continuation of the trunk line road to market? We cannot be safe unless the whole road is equally under our control at all times. Has the United States to-day this control or the power to procure it in case of sudden requirement? In this I have only pointed out what would be our condition if we were not directly involved in the war. I need not comment on what our condition would be if we were a party to it.

We have, it is true, a comparatively small amount of tonnage left in the foreign trade. But what protection has Government even for the little that is left? The mention of our navy only excites a smile. We have practically no means of protection whatever for any of these national interests. We could not to-day properly repulse an attack made by the weakest naval power of Europe. To face the fact squarely is the surest way to a remedy.

The common answer to statements of fact like these is, I am aware, that we are in no danger of attack; that we are, and shall remain, free from European complications; and that peace will be our perpetual possession. But that is no answer at all. It is a nation's duty to guard against the possibility, as well as the probability, of attack. The same answer would doubtless have been given in 1858. In fact, in that year the Secretary of the Navy said: "All our past experience has evinced the necessity of an increase of the navy. . . . Although it may be delayed, yet the time will soon come when this policy will be forced upon us under circumstances of great disadvantage, if not voluntarily adopted." The increase asked for was not granted, small as it was; but how soon that prediction was verified, though the

assault came not from without, but on that land-board which Jefferson deemed secure. But, aside from our own prospects of war, I have shown that, in a war between foreign nations, we should be the greatest sufferers through the delay and endangering of our products on their way to market. And what does the condition of the great European nations to-day make the more probable, peace or war? The following will give answer:

STANDING ARMIES OF THE LEADING NATIONS.

<i>Nations.</i>	<i>No. enlisted men.</i>	<i>Annual expense.</i>
Russia	788,000	\$144,216,000
France	471,000	100,000,000
Germany	420,000	92,574,000
Spain	330,000	49,147,000
Austria	296,000	50,680,000
Italy	200,000	37,984,000
Great Britain	192,000	83,800,000
British India, natives in British service	123,862	100,000,000
United States	27,976	30,240,000
Total	2,768,838	\$694,629,000

STANDING NAVIES OF THE LEADING NATIONS.

<i>Nations.</i>	<i>No. officers, seamen, etc.</i>	<i>No. ships.</i>	<i>Annual expense.</i>
Great Britain	58,800	400	\$52,935,000
France	47,500	226	40,799,000
Russia	42,169	150	20,000,000
Spain	12,048	138	6,536,000
Italy	10,800	66	7,544,000
United States	8,250	139*	15,022,000
Germany	7,365	60	11,165,000
Austria	8,014	68	4,600,000
Brazil	6,184	63	9,994,000
Sweden	6,141	141	1,353,000
Total	207,271	1,451	\$169,948,000
Total armies and navies	2,976,109		864,577,000

This shows, then, that the leading nations of the world employ in their standing armies and navies nearly three million

* More than one-half this number are tugs, worn-out sailing-vessels, and monitors for harbor defense, as will appear hereafter.

men, at an annual expense of over eight hundred and sixty million dollars. If to this were added the amount paid for the maintenance of militia reserves, the cost of arms and implements, of ships and fortifications, the grand total would be more than three thousand millions. Yet this immense preparation for war, with its great expense, originated from the brains of the wisest and greatest statesmen of the various European nations. No wonder the London "Times," in view of these things, said of a proposed increase of the German army :

"What is disturbing in the matter is the vivid revelation it affords of the terrible condition of the armed truce in which Europe exists from day to day. By wisdom and firmness, statesmen may avert a collision of these armed forces, but such an achievement will need incessant vigilance and patience. At such a time, England ought to hold herself as free as possible from all unnecessary entanglements, in order to be able, if necessary, to make her voice heard at some critical moment when the whole course of European history might be hanging in the balance. Far greater issues to the world are now at stake in Europe than in any other quarter of the globe, and, in deciding them, England may have a still more beneficent part to play than ever she has yet fulfilled. To play it effectively, she must be strong, and she should be at peace."

Suppose this collision were to come to-morrow, what effect would it have on our foreign trade, we having no means to meet the emergency? What effect would it have on the delivery of these fifteen million tons of surplus products which we are sending abroad, and on whose quick and safe delivery so largely depend the prosperity and financial security of the country? We, too, need to be strong and at peace. But with our present dependence upon foreign carriers, we should be helpless in case of emergency. We could neither carry nor protect our products, to say nothing of being powerless to take the opportunity that would be offered in part to regain the carrying trade that was taken from us during our civil strife. We could not meet the enormous demand that a foreign war would make upon our products, for want of ships and of means to build them. Washington's idea was the true one—that we are only prepared for peace when we are prepared for war.

If ever nation paid the penalty of non-preparation, this nation paid it in blood and treasure during our civil war. For want of preparation we suffered everything short of the destruction of

our Government. Our wonderful recuperative power, however, made us soon forget our great losses caused by neglect. What was our naval condition before the war broke out?

In 1858 we had above five million tons of sea-going tonnage, and stood second only to England as a commercial power. What navy had we to protect this tonnage? Of steam we had this formidable fleet: Fourteen wooden steamers, eight of them of three thousand tons each, speed not to exceed nine knots; three side-wheel steamers, of no efficiency as war steamers; two tenders, one dispatch-boat. This fleet was scattered. Of sail we had ten ships of the line, two of them unseaworthy; ten frigates, only two of them serviceable; twenty sloops, eleven of them useless; and some store-ships. The Secretary of the Navy recommended converting the eight ships of the line into steam frigates, as they were of little value as they were. The importance of speed, he said, could not be too highly estimated. Of two war vessels, equal otherwise, the one having greatest speed would possess a decisive advantage, and in a contest be most sure to win. Wind could no longer be relied upon in naval warfare—steam was the essential. Yet there was not a fast steam vessel in the whole navy. The Secretary declared it was impossible, with the existing naval force, to give adequate protection to the persons and property of American citizens on land and sea in all parts of the world. But his appeals for appropriations to rebuild old vessels and build ten new war steamers that were imperatively required, went unheeded.

Mr. Toucey did all that one man could to impress upon Congress the need of a more powerful navy, in order to maintain our rights and the honor of the country. But practically our naval condition remained little better in 1860 than it was in 1858. What was the result? While in 1860 the Secretary could not get from Congress an appropriation of a million, in a year afterward the Government was spending millions for naval purposes; building ships of green timber, which rotted in many cases before they could be launched; buying ships wherever they could be had at any price, and leaving their place in the carrying trade to be filled by foreign carriers; doing the best that could be done in the rush of an emergency, and paying roundly for it; spending millions where thousands would have gone further if properly expended in time of peace. The following shows the war expenditure for seven years:

EXPENDITURES OF THE WAR AND NAVY DEPARTMENTS.*

<i>Years.</i>	<i>Army.</i>	<i>Navy.</i>
1860.....	\$16,472,203	\$11,514,650
1861.....	23,001,531	12,387,157
1862.....	389,173,562	42,640,353
1863.....	603,314,412	63,261,235
1864.....	690,391,049	85,704,963
1865.....	1,030,690,400	122,617,434
1866....	283,154,676	43,285,662

The want of a strong navy to effectively blockade the Southern coast at the beginning of the contest was our weak point. Had we expended between 1850 and 1860 even the \$42,000,000 that were granted in 1862, and to that extent built up a steam navy suitable to our commercial position, we could have closed every Southern port, and, by shutting off the sources of supply, have terminated the war within a year. This was the opinion not only of Secretary Seward, but of other eminent statesmen. A glance at the expenditures subsequent to 1862, as given above, will show somewhat of the financial saving such a termination would have effected. Who can estimate the value of the lives and property that would have been saved in such an event?

What did our Government do in its extremity? Probably the best that could have been done at such a time, as I have said. And in what I say of our naval expenditures I am not criticising what was done; I am condemning only the want of preparation, the do-nothing policy that allowed us to reach such a time unprepared. The terrible cost and loss were an inevitable result of that neglect.

Secretary Welles's report, in 1868, shows that the number of vessels built and begun by and for the Government, after the firing on Sumter, was one hundred and seventy-nine, at a total cost of some \$80,000,000. Of these about one-half were built in the navy-yards, though the power to create them there came from the private workshops; the rest, together with all the engines, were built in private yards, the Government, with all its navy-yards, not having the means to build

* These enormous sums, it should be remembered, were not gold, but our depreciated currency. Through want of preparation, the Government credit had broken down, and its money during this expenditure was worth only fifty cents on the dollar, so that really double the price was paid for everything. Add to this the sum paid by States, counties, and cities to send men to the field, and the immense cost will be seen.

an iron-clad. The most important war-ships were not finished until after the war was over, and no less than one hundred and twenty of the vessels were not ready for use until 1863 and 1864, long after the contest should have been and would have been ended had our navy possessed even fifty good iron and steam war-vessels in 1861. It was a well-known fact that a great part of these vessels and of our vast naval expenditure were undertaken by the Government, not to crush out the Southern Confederacy, but to meet the emergencies threatening us from other quarters; to serve as precautionary measures against the unfriendly feeling that existed and was growing against us in England and other foreign countries. And great credit is due to the wise and courageous leaders of our Government who took the responsibility of those measures in behalf of the Union. Had they not succeeded, what a spectacle we should present to the world to-day as a divided country—two nations fighting perpetually against each other's best interests, instead of a prosperous and indivisible Union. In the building of these ships, also, was proven the marvelous energy and ability and resources of our people when called upon to meet a sudden crisis.

In addition to the ships built, the Government bought four hundred and ninety-seven ships of all sorts in character, tonnage, and price, at an expense of about forty millions more. It was impossible to stop to consider the fitness of these vessels for anything but the immediate requirements of the nation, nor was it a time to think about expense. It is not strange, therefore, though it is a striking comment on the consequences of not providing proper defense at the proper time, that after the war three hundred and sixty-three of these purchased ships were sold for what could be got for them at public auction, while ninety-seven more were lost, destroyed, or sunk as obstructions during the war, leaving but thirty-seven still in service in 1868. All this was necessary in a war with an enemy that had no navy. What would have been our position if we had been attacked by a nation that had a navy?

Whatever there is in our naval record that is unpleasant to reflect upon, was due entirely to a lack of the proper means of naval defense. That should be borne in mind. The glorious deeds of our naval heroes, and the great things done with what resources were obtainable, fill famous chapters of our history that are familiar.

But it may be said by some that, while our naval condition was so pitiable in 1860, it is far superior to-day, through the navy that was built up during the war. Unfortunately, that is not the case; while, if we compare the naval progress we have made since 1860 with the naval progress made by the chief European nations, it will be found that we are far more incompetent and unprepared to meet an attack than we were in 1860. Let us look at the condition of our navy to-day.

The one hundred and thirty-nine ships accredited to the United States in the table above make a fictitious showing of strength. What is the character of these ships? According to the navy register of 1879, sixty-seven were steam sea-going vessels of war of all classes; twenty-two were sea-going sailing vessels of war; twenty-four were iron-clads, for coast and harbor defense; two were torpedo vessels, and the remainder were tugs, dispatch-boats, etc. Regarding this fleet, the Naval Committee of the House of Representatives reported as follows: "Small as the number of our naval vessels is, as compared with the other navies of the world, in real fighting power the navy is infinitely smaller, and it is time Congress and the country should face the fact and provide the remedy." Going into the details, we find that the sailing vessels are "old worthies of a past age," only five of them in bare condition for navigation, none of them fit for any war service whatever. Of the twenty-four iron-clads, only fourteen are in condition for effective service, and not one of them carries a rifled gun. This leaves us only the sixty-seven steam vessels—the navy proper—to consider. The five "first-rates," which were originally fine war-ships, are now classed as obsolete, and practically out of use for war. Of the twenty-seven "second-rates," but nine are fit for sea, seven are worthless and to be sold, three are rotten on the stocks, the rest are disabled or under repair. Of the twenty-nine "third-rates," six are laid up as worthless, six are undergoing repair, two are antiquated paddle-wheel steamers, of no naval value; the remaining fifteen are small cruising vessels, none of them of a thousand tons, or able to be effective in a war with a modern naval power. In this whole fleet of steamers, but one has a speed of fourteen knots, three have a speed of thirteen, four a speed of perhaps twelve knots. The rest are slow, large consumers of coal, and furnished with a style of machinery long since discarded by even the merchant marine of the world. No one of them could overhaul an ordinary merchantman. Yet

speed is the first and indispensable element of success in naval warfare to-day. These figures are all taken from Congressional reports, and are authentic. They show that we have but twenty-four ships of war that could go to sea in case of attack on us, and that not one of these is a first-rate war-ship; hence, that we have practically no means of naval defense worthy of the name. We are liable to insult, because it is known all over the world that we are not able to repel it—the condition Washington urgently advised the nation to avoid. Our utter naval weakness was made apparent in 1875, when trouble with Spain seemed imminent. Attempt was made to put in shape some of the old iron monitors that were built in a hurry in the midst of our war, and useless as modern war-ships. None of them were capable of making seven knots an hour; but we had nothing else, and must patch up something to make a show.

To take care of this navy, which certainly is not strong enough to take care of itself, we have eight navy-yards, valued at one hundred million dollars. It is unquestionably wise to maintain these as a reserve power. But in these yards there are not facilities to produce a single iron-clad, nor can the plates required for such a vessel be made in this country; so that, if we wanted to reconstruct our navy to-day, we could not do it without buying the armor plating from Great Britain. Then these yards employ only some three thousand men, while they have capacity for sixty thousand. It is not our policy to keep a large working force in them while at peace, nor to make them schools to educate skilled mechanics. For these, in case of emergency, the Government has relied upon the private ship-yards and workshops, and it was the sixty thousand workmen called from these private sources that filled the empty navy-yards, and made them of service in the time of our need. How invaluable to our Government then proved this army of mechanics, raised from those practical schools of industry which the policy of the free trade and free ship advocate would have shut up, leaving us dependent upon foreigners for the means of defense, instead of having the power within ourselves to produce them. Soldiers and sailors may be obtained at any time; not so skilled mechanics. They must be trained up, year by year, and no amount of money could procure them, at short notice, for a country that had them not in its workshops.

It should be said here, in justice, that our want has never been for trained, brave, and efficient men, whether in command

or in the ranks. In our navy we have always had men of talent in their profession equal to any who can be named in the naval annals of the world. That we should retain a naval force of so high character and efficiency, with so inadequate a fleet, is a great credit to our nationality. In case of a naval war to-morrow, we could send into it some of the best naval material, in men, in the world; but to send them into it in any war-ships we possess would be like the blunder of sending the Six Hundred to their death in the charge at Balaklava. Every American recalls with pride the naval achievements in our late war, and in that more especially naval war of 1812, where our naval forces incontestably proved their superiority, and won for this country such recognition and prestige on the ocean as we could not compel to-day. Our whole naval record from 1775 down is a noble one, making our position now appear but the more unworthy and pitiable by contrast.

In view of the facts, which are open to study for all, I think there will be no question that this nation is destitute of a navy adequate either to defend its coast and harbors, its coasting trade, and its flag on the high seas, or to make aggressive warfare on the commerce of any nation that might attack it. Its condition is lamentable and dangerous, and utterly without excuse in a nation so great, prosperous, and powerful in other ways. The practical question is, How can this condition be changed into what it ought to be in the best and most economical way? Must we maintain a large and expensive navy, as the European nations do, or can the end of protection be secured with less cost?

The policy of this Government has always been opposed to the maintenance of a large standing army and navy, to eat up the substance and place a heavy tax on the prosperity of the people. Its land policy has been to maintain the nucleus of an army, and to rely for defense in emergency upon the militia, which is supported by Congress and the States at a comparatively insignificant expense. There is no doubt that our resources are ample under this system, and it is both wise and cheap. The naval policy has been similar, to maintain a small navy. But here the essential difference of conditions has been overlooked. Soldiers can be called out, and volunteers enlisted, and march away at a day's notice on the land; but while sailors may be enlisted in plenty, they must have ships in which to go forth to

battle on the sea. No matter how small the naval force may be, the Government, in order to be safe, must keep up a naval fleet in readiness for action. We have not done this. How can we do it so as to make our naval policy also wise and cheap?

In the discussion of this matter of naval defense which has taken place of late years, much has been said about making provision for the safety of our harbors and coast,—and it cannot be done too soon,—but scarcely anything about inflicting punishment upon an enemy. This is, however, one of the most important features of naval power. Look at it a moment, taking England's position as an example. She cannot raise her own bread, and is dependent upon the outside world for the raw material—except coal and iron—to keep her factories running and her people employed. She has more money invested in ships and manufacture than France, Germany, and Italy—I might almost say the whole of Europe—together. She has to sell five-sixths of the products of her factories in exchange for bread and raw material, consuming only one-sixth at home; and these products are sent to the world's markets in her ships, which are also carriers, to a great extent, for the other nations. Her road to market is the common highway of all nations, the sea. No blow could be struck at her with so deadly effect as to attack her commerce, for this strikes at her factories. What effect would it have on her—since nations study their own condition as well as their enemy's before going to war—to know that we had a fleet ready to prey upon her \$700,000,000 worth of shipping? And would not a like knowledge on the part of other nations, also susceptible of attack in this way, tend to give this nation strength and dignity?

The protection of our harbors is neither a difficult nor a costly problem to solve. This secured, we do not need a great and expensive navy proper, like the European navies. But what ships of war we have should be of the most improved and effective class. In obtaining these, we have the benefit of the expensive experiments made by the European governments. Experience has proved that the first requisite is speed, which gives a wonderful advantage either in attack or retreat. To attain this, a million dollars might be spent on one ship, and though the maximum speed might not be required five times in the ship's life, it might be of more value and importance to the nation in a crisis than ten times its cost. One iron-clad of great speed would be more

effective than three slow ones of the same size and equipment. Fifty ships of this class would, of themselves, make a powerful navy. But beyond this we need a naval resource, readily within reach, yet costing the Government nothing in time of peace. The question is how we can, in the best and cheapest way, obtain such a resource. I take this opportunity to submit a plan by which I believe we can secure to the nation these important benefits.

The plan starts with the construction of one hundred fast iron screw steam-ships, to be divided into five classes. All to be engaged in the foreign trade.

20 of these ships should be of 4000 tons burden, with a speed of 16 knots.

20 of 4000 tons, with a speed of 15 knots.

20 of 3500 " " " 15 "

20 of 3000 " " " 15 "

20 of 2500 " " " 15 "

The last twenty to have a draft of water not exceeding, when loaded, fourteen feet, so as to enter some of our Southern ports. This would make a carrying capacity of 340,000 tons. Each vessel would make a voyage monthly, and, with the back cargo, would be equal to a carrying capacity of 8,160,000 tons per year. Deduct from this 25 per cent., as the vessels may not run full, and we should have 6,120,000 tons per year. Add to this our present carrying capacity, and we should have over 8,500,000 tons of commerce. The average price of carrying to foreign markets for several years past has not been less than \$7.50 per ton; this would make \$63,750,000. Those ships, being fast, would earn in passage money at least \$7,000,000, or a total earning of over \$70,000,000 yearly. This amount of gold retained in the country and distributed among our own mechanics and merchants, would strengthen our financial condition, make money cheaper and consequently lessen the cost of ships, as well as other articles manufactured in this country. The next feature of the plan is, How is this result to be accomplished? No man will question the fact that England, with her great advantages of cheap labor and cheap capital, commenced such a work as contemplated above about forty years ago, and in that time has expended on mail service, and in opening up

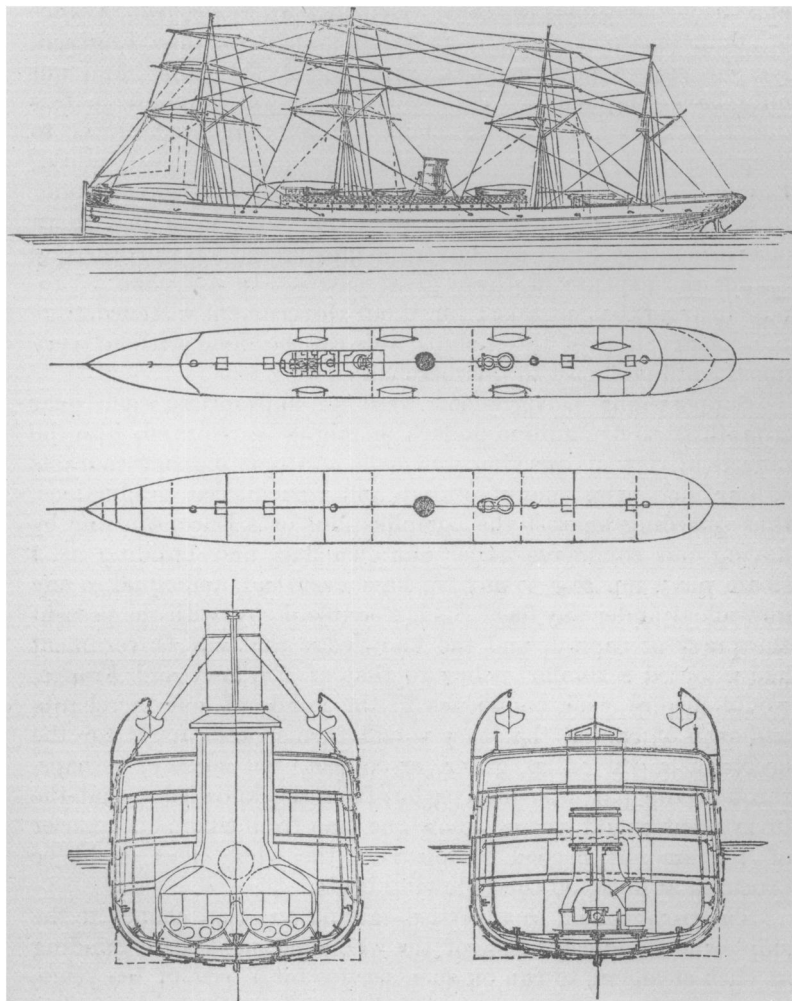
new markets which give her the grand position she holds to-day on the ocean, \$200,000,000, or an average of \$5,000,000 per year, and she yet continues the same wise policy where needed. France is doing this very thing to-day, and even more than England, for she pays a bounty on the building of the ship. And not only have England and France spent enormous sums in this direction, they have also expended millions on great navies to keep the road open for those pioneers of commerce. Indeed, England and France both made a great mistake when planning those vessels of commerce, in not having done it so that in an emergency they could be converted into vessels of war, thereby saving the expense of those great navies. In my plan, I propose to avoid that mistake; for, if our Government will encourage the construction of those ships, this can be done without very much additional cost to the merchant.

Suppose our Government were to appropriate each year from three to five million dollars, as might be required, with the objects in view of carrying our mails and opening new markets to our increasing manufactured and agricultural productions, thus guarding against the complications of a European war by having our commerce under our own flag, and building up a steam navy superior to any we have ever had, and equal to any now afloat under any flag. Such a course, I say, with the present cheapness of capital, and the knowledge that our Government had adopted a similar policy to that of England and France, would inspire such confidence in the minds of our merchants and men of capital that they would furnish the capital for the accomplishment of so grand an object, not merely, perhaps, through any patriotic motive, but from the knowledge that the investment would pay. I know one man from whom one-quarter of the amount needed to construct the whole fleet could be procured at once, on the following basis:

The Government to advertise—giving an equal chance to the ship-owners and capitalists of the whole nation—for the building of such steamers, to run on such service for a term of ten years, these ships to conform in speed and tonnage to those above classified, to be built on plans approved by the Government, limiting the mail service to a certain amount per mile, according to speed and tonnage, to be given to the lowest bidder.

The following drawings [pages 191 and 194] represent a ship as a merchantman altered to an iron-clad cruiser.

MERCHANT STEAMER.



Length over all	416	feet.
Beam	44½	"
Depth	29	"
Deep-load draft	23	"
Speed	15	knots.

Scale, 120 feet to 1 inch.

This alteration, when required, could be made in thirty days ; our eight navy-yards doing sixteen, and private yards the rest. The plans are so arranged, by provisions in the original construction, that it would not cost the merchant more than \$5,000 extra on each ship. They could be taken at any time under charter by the Government, and having the armor plates ready in its own yards, they could be put into service in the time specified.

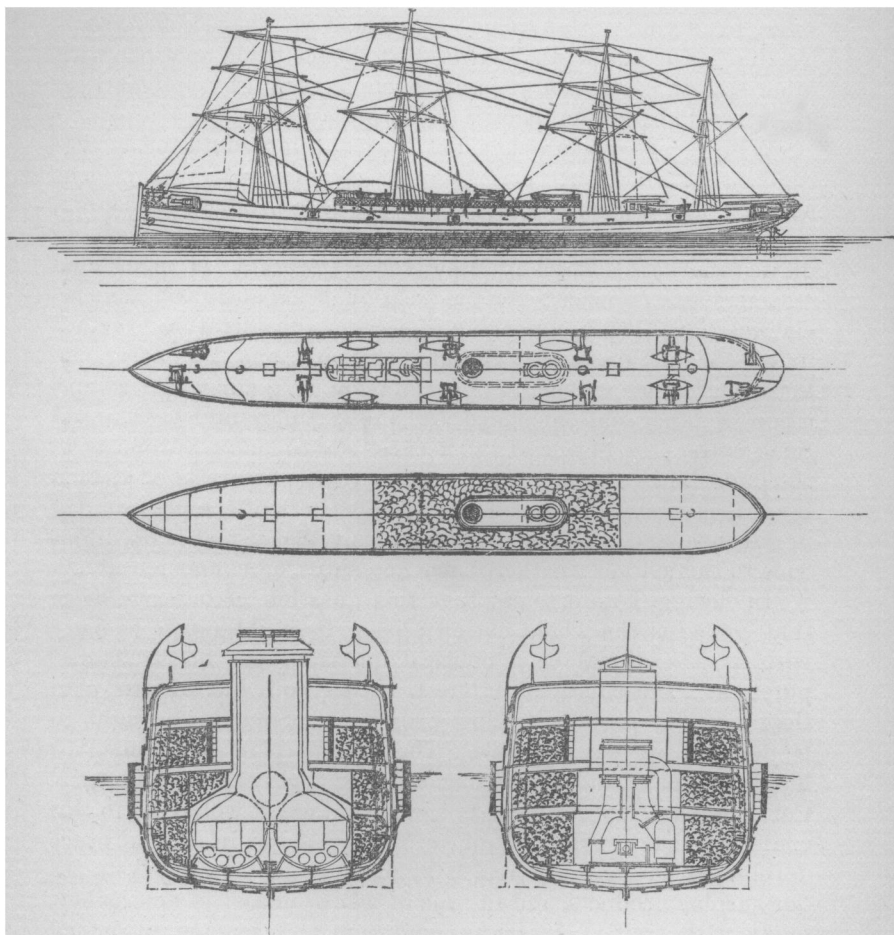
When the vessels are not required for war purposes, the armor could be taken off at not more than \$2,000 cost, and the ship again put to her legitimate work. This fleet would give us more and better protection than we ever had from our present or past navy. These one hundred iron-clads, manned by six thousand men, would be the best practical school for Annapolis graduates, giving them such practical knowledge of the harbors of their own and of foreign countries as would be of inestimable value to them and to the nation. One of these four-thousand-ton ships would require a crew of three hundred and fifty men, the others in like proportion. The drawings presented herewith show that the ship would have a belt of steel nine inches thick and nine feet deep, backed by the coal in her bunkers, this proving a great resistance to shot or shell, according to the best authority in the British Navy—the present Chief of Naval Construction, Mr. Barnaby. This officer says: “Not less interesting is the protection which has been recently devised in England for the merchant ship employed in time of war under the Queen’s flag. No amount of resistance which an armor-plate could show would give the satisfaction which I have received from the excellent behavior of the simple combination of fuel and thin loose iron sheets. Coal-armor and torpedoes together have given to the fast merchant shipping of England a significance in warfare wholly new. In the place of being helpless wards to be defended, they become active combatants—a strength instead of an embarrassment.” This idea is utilized to a large extent in the plan proposed. The ship would carry, independent of small arms, torpedoes, ammunition, and provisions for her crew, three thousand tons of coal, which would keep her at sea four months, and with the aid of sails,—when great speed is not necessary,—very much longer. The boilers and machinery would be placed below the water-line, except a small part of the engine, which is protected, as represented in the drawing, by a steel turret, and the smoke-stack, as shown, is a telescopic pipe, to be lowered when in action.

The plan in its details might be improved by being referred to a board of naval officers and practical ship-builders and merchants, and, if approved, would be entirely consistent with the views of the founders of our Government, and with the best interests of the nation at present.

Had we possessed fifty, or even twenty-five, such ships at the beginning of our civil war, it is almost beyond doubt that we could have ended it within a year by blockading every port, and driving off such aids as the Shenandoah and Alabama. With all her great navy, England recognizes the value of such a supplemental fleet, and has encouraged its construction by offering mail compensation. France, after long trying the policy of buying ships from England, as some are urging we ought to do, has seen that the nation that would own ships must build them, and has passed a law giving a bounty for the building of merchant ships. Prince Bismarck, in a memorial to the German Reichstag on the subject of the new French law, said that after many years' discussion, and exhaustive inquiry, the French had decided that a whole series of privileges was needed for the French merchant service. He quoted from a memorial of British ship-owners, in which they said: "It is no exaggeration to assert that before the expiration of a year, after the promulgation of the French bounties bill, the French merchant service will receive a considerable augmentation, and that it will share with England the transport trade of the Atlantic, as also the trade with South America, East India, Australia, and other British colonies. We will not depict the consequences of this. The bounties are said to constitute a compensation for certain burdens and duties imposed upon the respective circles. The recipients, however, view them in the right light, viz., that of State aid, which will enable the French owners speedily to establish and develop a great merchant navy, so that the shipping transport trade may be carried on to a larger extent than hitherto by French vessels, and *in order to create for France a powerful navy, which may prove of effective service in time of war.*"

This shows conclusively how such a merchant marine is looked upon as an effective means of defense by the English and French; and Prince Bismarck joins in the view. He continued that it was admitted by all, in the arguments used in France, that "the merchant service is the handmaid of all other industries, of agriculture and commerce. On the day when the freight trade is

MERCHANT STEAMER CONVERTED INTO AN ARMOR-PLATED
CRUISER.



Steel Armor, 9 inches thick, 9 feet deep.

NUMBER AND CALIBER OF GUNS :

Two 8-inch rifled guns.
Six 80-lb. " "

Two 60-lb. rifled guns.
Two Gatling guns.

given over to foreigners, a mortal blow will be dealt to all the industries of the country. It would be an anomaly, from a national stand-point, to cede the transport trade to industrial rivals. In choosing these to export home products, people are exposing themselves to all kinds of foul play." Besides, it was the merchant service, and its captains, that created profitable trade relations with other countries, while it was impossible to regain foreign markets with the aid of foreign agents and negotiations.

With regard to mail subsidies to steam-ship lines, the memorial says: "These enterprises cannot dispense with Government aid, and this has always been afforded in a productive manner, as soon as it was a question of paving the way for our traffic in distant markets. England has given the example of using mail steamers as the pioneers for the creation or expansion of commercial relations. It is deserving of serious consideration, whether under the circumstances German shipping and commerce can hope for further prosperous development as against the competition of other nations aided by public funds and assistance." Such is the view of one of the keenest statesmen of Europe as to the importance of a merchant marine to the interests of a country. It is in strange contrast to some writers of the present day in our own land, who say contemptuously that it makes no difference to this nation whether it has any ships or commerce at all.

In closing, I want to say that this question of defense is one that concerns the whole nation alike. It ought not to be dealt with as a sectional or a political question, but on its merits purely as a great national interest. If anybody has a better plan than mine to propose, let him propose it. Something ought to be done for our navy at once. The present plan is intended to build up a navy and revive our carrying trade at the same time. Can there be any doubt as to the advantage it would be to this country to have such a fleet of swift steam-ships, in time of peace developing the nation's wealth by opening up new markets for our surplus products, and in time of war or in case of emergency, ready with trained American engineers and seamen to defend the nation at its call? Such a fleet might well be named the militia of the sea. With it we should possess a mighty safeguard, worth a million-fold whatever trifling expense it might be to the nation. In a merchant marine of this class, the United States must seek not only the promoter of its commerce, but the economical and effective means of its naval defense.

JOHN ROACH.